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ABSTRACT

A discussion is presented of a project that attempts to link research interest in teachers' implicit theories, attitudes, beliefs, and teaching practice and with a preservice introductory educational psychology course. The main purpose of the study was to make more personally meaningful and practical the pedagogical theories, research, and ideas studied in the course by engaging the 150 prospective teachers, enrolled in three sections of a course in educational psychology in a process of self-inquiry leading to an articulation of a "Beginning Personal Theory of Teaching." The second purpose was to begin a long-term study of the development of teachers' personal theories of teaching from their articulated beginnings in the preservice program, through the induction years, and into experienced practice. This paper describes the nature and content of the self-inquiry program and recounts how the student experienced it. This provides the basis for some reflections on the university-based component of the preservice teacher education program. (JD)

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Making Explicit Implicit Theories of Teaching: Starting Points in Preservice Programs

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Making Explicit Implicit Theories of Teaching: Starting Points in Preservice Programs

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Abstract

Over the course of one academic year a total of 150 prospective teachers, enroled in three sections of a course in educational psychology, engaged in a program of experiential reflective activities designed to direct them to examine and articulate in written form their implicit understandings about various aspects of teaching, learning, and the teaching-learning process. The project was initiated as an attempt to link my research interests in teachers' implicit theories, attitudes, beliefs and their development, and my own beliefs about personal knowledge and teaching practice with the traditions of the course. The main purpose of the study was to make more personally meaningful and practical the pedagogical theories, research, and ideas studied in the course by engaging the students in a process of self-inquiry leading to an articulation of a "Beginning Personal Theory of Teaching" (BPT). The second purpose was to begin a long term study of the development of teachers' personal theories of teaching from their articulated beginnings in the preservice program, through the induction years, and into experienced practice. Information was gathered using two different methods to serve the two purposes of the study. In order to gauge student response to the program of activities each student received, at the end of the course, a response sheet that was completed anonymously and on a voluntary basis. The students were asked to comment on matters pertaining to the perceived relevance and usefulness of the self-inquiry program in their preservice preparation, and to speculate about its future relevance and use. The student response data was categorized, and summaries were prepared of the student teachers' perceptions of the BPT program. Information relating to the second purpose was provided by a small group of student teachers who volunteered to participate in group discussions and individual in-depth interviews organized around their preconceptions and developing conceptions of teaching. In this paper, I describe the nature and content of the self-inquiry program and recount how the students experienced it. This provides the basis for some reflections on the university- based component of the preservice teacher education program.

Making Explicit Implicit Theories of Teaching:[1]

Starting Points in Preservice Programs

Not long ago I attended a presentation of some recent research on children's conceptions of science, and the implications of this work for the teaching of science in schools. The researcher, a science educator of the "constructivist" school, cited excerpts from interviews with several school-aged children who were asked to comment on their understandings of various scientific concepts, on their teachers' explanations for these same phenomena, and on the apparent discrepancy between the two conceptions. What I found particularly interesting in all of this was how the children typically attempted to account for the differences between their conceptions of science and the information presented to them by their teachers. The students explained that the science taught in classrooms is different from the science that exists in the "real" world. What the teacher says (and demonstrates) might be true according to the laws of science but in everyday life things just don't work that way.

The explanations offered by these science students are reminiscent of remarks we so often hear from prospective teachers in teacher education programs who insist that the pedagogical theories and concepts studied at the university, although sound and important, are not necessarily relevant to what goes on in "real" classrooms. What they hear, read, and study on campus contributes

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[1] I wish to acknowledge the Faculty of Education Research and Development Committee for its support of this research.

to their theoretical understanding of pedagogy but in the "real" world, in classrooms, these theories do not play out. What goes on in school classrooms is actual; what goes on in campus classrooms is largely only possible. Unfortunately, this is the understanding that many new teachers take with them when they leave their teacher preparation programs.

Science educators who base their work on constructivist ideas assume that learning is more than just a process of knowledge acquisition, that learning takes place through a process of reorganization and reconstruction of existing knowledge and concepts. They contend that understanding and taking into account students' preconceptions of scientific concepts is important so that instruction can be planned and carried out in ways that will facilitate the process of knowledge reconstruction and help to bring about conceptual change (Hewson & Hewson, 1988). This seems like such a commonsensical notion; not just for the teaching of science, social studies, and the like in public school classrooms but also, and perhaps more importantly, for the preparation of prospective teachers of these subjects.

It is typically the case that in the university setting prospective teachers study philosophical issues, pedagogical principles, and research related to the practice of teaching. In the schools they complete the practical component of the program where they observe and practice various teaching approaches, skills, and techniques. The connection between the two components is often difficult for the student teachers to make. When they

leave their teacher preparation programs to cope with the complexity of their own classrooms, well-versed in formal pedagogical theories with fairly clear understandings of various philosophical foundations and perspectives, these new teachers have difficulty "applying" what they learned at the university. Faced with the ever-increasing demands of modern classrooms, not to mention the experience of having to make the transition into the profession, it is not surprising that many new teachers, in an effort to do the best they can, resort to doing what comes naturally, what they know best. They teach as they were taught, as they observed it being done, or as "seems" appropriate with limited understanding of the pedagogical principles underlying their actions. And the "theory" studied at the university, at least for the first few years, continues to be perceived as unrelated or only partially connected to the real world of practice.

We can and have offered various explanations for what we see as inaccurate perceptions of the importance and relevance of the content of teacher education programs. We attribute the prospective teachers' misconceptions to many things: lack of experience, an inadequate understanding of what it means to teach, an overriding concern with self, and an inappropriate attitude toward learning to teach, to name a few. Lack of assistance and support in the beginning years of teaching permits these misconceptions to remain.

Historically, we have done little more than explain and

accept the reality that student teachers (and beginning teachers) perceive what they learn at the university and what they learn in classrooms as important but not necessarily congruous. But, as one educator puts it, "It is no good ignoring [the students'] initial perceptions of 'research' as irrelevant, or dismissing their need for 'strategies for survival' as the mark of an apprentice, of the low-level thinker, of yesterday's teacher" (Lucas, 1988, p. 56). In recent years, teacher educators who follow this line of thinking have begun to take a constructivist approach to teacher education acknowledging the importance of taking into account beginning teachers' preconceptions of educational issues.

At Monash University, for example, each year for the past decade or so, prospective science teachers have graduated from a teacher preparation program based on constructivist views of education. One guiding principle of that program derives from the perspective of student teacher as constructivist learner with preconceptions of self, of science, and of teaching and learning. The teacher preparation program is designed to take into account and build on these preconceptions by providing experiences which enable the students to assess their existing knowledge and beliefs, reflect on how they relate to the new ideas presented, and rethink and discuss their ideas throughout the reconstruction process. "The well developed views of teaching and learning [that student teachers bring to the program] are very persistent and often at odds with the views we hope to cultivate. Hence the views need to be identified, discussed and evaluated by student teachers in light

of carefully managed teaching/learning experiences" (Gunstone & Northfield, 1987, p. 3).

Goodman (1988), reporting on a study of preservice teachers' professional perspectives, expresses a similar view. "When exposed to new ideas or experiences, students tended to act first on an intuitive rather than an intellectual level. No matter how logical or sound an idea seemed, if it directly contradicted a student's intuitive screen [preconception], it was usually rejected" (p. 130). Thus, says Goodman, "It would appear that getting to know the students' "intuitive screens" is extremely important, if educators are interested in having a significant impact on their students. . . . Once the intuitive screen of a given student is understood by faculty members, then different strategies can be developed to best educate the individual" (p. 134), either to reinforce or alter the students' preconceptions.

Another educator, (Grimmett, 1988) describes the constructivist approach to teacher education in this way: "The constructivist approach . . . begins with student teacher concerns and prior conceptions of teaching and learning as they pertain to specific classroom contexts and brings in research-validated knowledge as a way of freeing them from inappropriate conceptions of teaching and helping them to visualize the possibilities inherent in the context under discussion" (p. 50-51).

Students entering teacher preparation programs bring with them the beliefs, attitudes, ideals, and ambitions developed over years of life experience. As public school and university students, in

some cases as parents, in others as community leaders or camp counsellors, and in all cases as persons involved in human affairs they have implicit thoughts and ideas about education and teaching. In most cases, these preconceptions remain unarticulated, or if made explicit are accorded little or no validity; yet, they are the personal foundations upon which professional practice is built. Goodman (1988) calls these preconceptions "intuitive screens" through which student teachers interpret their professional education. These screens, the author suggests, give the students an orientation point from which they make sense of the activities and ideas presented to them (p. 130).

Teaching is a complex and personal activity. Each teacher's practice is an expression of a personal and professional way of knowing that is shaped and informed by personal and professional background, experience, perceptions, beliefs, goals, and so on (Cole, in press). Becoming a teacher is a complex and personal process. Programs hoping to facilitate this process must necessarily take this into account. Research on the influences of life experience on teacher thinking and teacher practice (Ball & Goodson, 1985; Butt, Raymond, & Yamagishi, 1988; Clandinin, 1986; Clandinin & Connelly, 1988; Feiman-Nemser & Buchmann, 1986; Knowles, 1988), and on teachers' implicit theories, attitudes, and beliefs (Bussis, Chittenden & Amorel, 1976; Cole, in press; Holt & Johnston, 1988; Hunt, 1987; Munby, 1984; Olson, 1984) provide considerable evidence to support this notion.

Feiman-Nemser and Buchmann (1986) argue that "effective

teacher preparation needs to pay attention to the prior beliefs of candidates and also prepare them to learn from their teaching in ways that go beyond the typical trial-and-error approach and reliance on personal preference". They go on to suggest that teacher education can help prospective teachers understand their prior beliefs and dispositions and if inadequate can help to bring about change (p. 2). As Clark (1988) observes, we should consider "the preconceptions about teaching and learning held by our students [and] take account of what our students know and believe as we help them to prepare to be teachers" (p. 7). Ross (1988) suggests that teacher educators help preservice teachers become more aware of their past experiences and preconceived beliefs about teaching "not to disprove the relevancy of these experiences, but simply to expose individual beliefs to critical examination . . . [so that they will learn] to engage in systematic analysis of their own curricular goals and methods" (p. 5). By encouraging beginning teachers to understand their implicit theories and beliefs we help them to, as Polanyi (1958) suggests, bring to light and affirm the beliefs implied in their thoughts and practices, discover what they truly believe in, and formulate convictions they hold (p. 267).

Overview of the Study

Last year, I initiated a project that was an attempt to link my research interests in teachers' implicit theories, attitudes, beliefs and their development, and my own beliefs about personal knowledge and teaching practice with the traditions of a preservice introductory educational psychology course. The main purpose of

the study was to make more personally meaningful and practical the pedagogical theories, research, and ideas studied in the course by engaging the students in a process of self-inquiry leading to an articulation of a "Beginning Personal Theory of Teaching" (BPT). The second purpose was to begin a long term study of the development of teachers' personal theories of teaching from their articulated beginnings in the preservice program, through the induction years, and into experienced practice. In this paper, I will describe the nature and content of the self-inquiry program and will recount how the students experienced it. This will provide the basis for some reflections on the university- based component of the preservice teacher education program.

Methodology

Information was gathered using two different methods to serve the two purposes of the study. Over the course of one academic year a total of 150 prospective teachers, enroled in three sections of a course in educational psychology, engaged in a program of experiential reflective activities designed to direct them to examine and articulate in written form their implicit understandings about various aspects of teaching, learning, and the teaching-learning process. In order to gauge student response to the program of activities each student received, at the end of the course, a response sheet that was completed anonymously and on a voluntary basis. The students were asked to comment on matters pertaining to the perceived relevance and usefulness of the self-inquiry program in their preservice preparation, and to speculate

about its future relevance and use.

The student response data was categorized, and summaries were prepared of the student teachers' perceptions of the BPT program. It was not my intention to conduct a formal evaluation of the effectiveness of the program. I wanted only to gather some information about the students' views on the program as a basis for reflection.

The Self-Inquiry Program

The ten activities comprising the BPT program were experiential in nature, and designed to correspond with the main topics covered in the educational psychology course (e.g. styles of classroom management, "effective" teaching, roles of the classroom teacher, learning styles, discipline). Each new topic was introduced with a BPT exercise. The procedure for the completion of each activity was based on the four-phased experiential learning cycle (adapted from Kolb, 1984 by Hunt, 1987). Each activity began with an imaging exercise in which students were asked to create, or recall and recreate an experience relating to a particular issue or topic. This *experience* provided the basis for personal *reflection*. The students, then in some way, recorded the event describing their perceptions of and responses to it. Either independently or through small or large group discussion and *analysis* they made sense of the experience drawing conclusions about their understandings. These conclusions were articulated in the form of summary statements that they were then able to *"test"* over a period of time to see how they fit with the

formal theories they were studying as well as with the teaching practices they were observing during their practica. At the end of the program, after this period of examination, the students "reported their results". They articulated their conceptions in a comprehensive explication of a "Beginning Personal Theory of Teaching". This final statement was a synthesis and extension of the insights gained from each BPT exercise.

The Student Teachers' Experience of the BPT Program

Overall, the students perceived the BPT program to be a worthwhile experience in self-discovery, placing value on both the process and product of self-inquiry. Their responses suggest a perceived need for and appreciation of an inquiry-based component in the preservice program. *One of the reasons I decided to take this particular section of the course*, admitted one student, *was so that I would be forced to think about my personal feelings, my theory of teaching. I guess because I think that that's an important thing to have thought out, and I might be the type of person who might be lazy enough not to worry about thinking about it if I wasn't encouraged to.* Another said, [The BPT program] *forced me to put my thoughts on paper where I could see that I really did have a theory about teaching and the teaching profession. At first I had a hard time defining or finding my philosophy. I was unaware that I really had one.* One student wrote, *"As the twig is bent, so grows the tree." But here the twig is given an opportunity to identify how it is bent, and to change accordingly, if necessary.*

The raised self-awareness that was reported can perhaps be classified into three broad areas: 1) awareness of self as prospective teacher, 2) awareness of career choice and the development of professional goals, and 3) awareness of self as developing professional.

Awareness of Self as Prospective Teacher

It is not surprising that the majority of the students reported increased awareness of themselves as prospective teachers. The formation of a professional identity is a natural and integral part of the teacher development process. At some point, student teachers begin to see themselves as teachers. When and where this identity formation takes place and the extent to which teacher preparation programs influence it is discussed in the literature on teacher socialization and biography (See, for example, Crow, 1987a, 1987b; Knowles, 1988). It seems, though, that these students found self-inquiry, even in this one course, useful in this regard. It helped them to gain insight into their developing conceptions of themselves as teachers, and to put the preservice program into perspective. Some students found the process of reflection and theory articulation to be particularly worthwhile; others commented on the importance of the end result. Some viewed the experience as an opportunity to:

*think; **reflect** (something we don't do enough of here); **consider** some of their deepest feelings; **understand** themselves and **open** their understanding to others; **organize** and **collect** thoughts; **evaluate** convictions and personal values; **specify** thoughts and*

feelings, to review beliefs and values about teaching; put thoughts on paper and thereby learn a great deal about themselves; clarify perspectives on teaching and its various aspects in order to conceptualize what teaching is all about; critically assess approaches to teaching by reflecting upon experience both as students and as student teachers; and see change over the year.

Others stressed the importance of the product of the self-inquiry experience. They perceived the final statement in the form of a beginning personal theory as:

a consolidation of the whole year's thinking and development; a summary of thoughts into useable pieces of information; conclusions about how theory has developed; a combination of ideas into a synthesized statement. Because of the very nature of the whole [preservice] *program,* remarked one student, *you're going in 15 directions at once. You need that one common element: This is why I am teaching. This is what I believe.*

One student, commenting on both the articulation process and the end product described the experience as one of analysis and discovery. *Theory articulation helped to stress certain points that repeated themselves throughout the program allowing me to focus in on those overlapping points to see how strongly I feel about certain components of teaching.*

A number of students reported on their raised awareness of the complex nature of teaching and of the difficulties and challenges awaiting them--*the rewards, the frustrations, the disillusionments. At least,* wrote one, *I have a clearer picture of what kind of*

teacher I want to be; and *I know*, said another, *what to expect of myself.*

Awareness of Career Choice and the Development of Professional Goals

We have all, at one time or another (some more often than others), wondered whether or not we have made the right career choice. Prospective teachers in teacher preparation programs are no exception. Usually, by the end of the first practice teaching session most prospective teachers know whether or not teaching is for them. Presumably, most who continue through to the end of the preparation program are satisfied with their career choice, and go on to be practising teachers. With the exception of a certain percentage, who for a variety of reasons leave the profession in the early years (See Ryan *et al*, 1980; Schlechty & Vance, 1983), most continue along their chosen career path.

The students whose responses are reported here completed the teacher preparation program. Presumably most, if not all, of them had decided that they had made the right career choice. Their comments indicate, however, that even once decided they did not dismiss the issue entirely. They seemed to continue to reflect at a deeper level, asking themselves more specific questions regarding career choice, and they seemed to recognize a need for the formulation and explication of professional goals. One student said, [The BPT program] *helped me to sort out what I was really doing at the Faculty. I know why I came but thinking about myself as a teacher is still a strange phenomenon to me; however, I know*

that it is the right decision. Another wrote, *These types of* [reflective] *exercises give people a chance to really think about the step they are taking in their lives and the impact they will have on others. This is a necessary process in developing a career or in making a career choice.*

Those who perceived the program as an opportunity to continue to reflect more specifically on and come to an understanding about their career choice reported that it helped them to: ***realize*** *and* ***affirm*** *why they went into teaching and what they hoped to accomplish in their jobs and careers; to* ***gain clearer views*** *of convictions and dedications to teaching; to* ***think about*** *the place of teaching in their lives; and to hopefully be more secure professionals.* One student's comment points to how important can be the role of reflection and self-inquiry in this aspect of teacher development. [The BPT program] *helped me to clarify why I want to be a teacher and what I hope to accomplish as a teacher. It also showed me that teaching may not be the career I choose if I find that I cannot meet my objectives in life through it.*

Others seemed to need or want to articulate professional goals. For these students the BPT program provided them an opportunity to: *think about what they* ***hoped to achieve*** *and to state some* ***realizable goals;*** *to formulate a philosophy regarding the kind of teachers they* ***hoped to be.*** Because, as one student pointed out, *You have to know what you want before you can make it happen.*

Awareness of Self as Developing Professional

It is becoming a generally accepted view that becoming a teacher is a lifelong developmental process. It is our hope, as teacher educators, that graduates of preservice programs realize this and are prepared for career-long teacher education. We hope that, during the preservice program, they will adopt a professional and reflective attitude, and make a commitment to ongoing professional development; and that, throughout their careers, they will continue to work to live up to that commitment.

Unfortunately, many, if not most, preservice programs fail to promote the notion of career-long development by not incorporating it into the explicit goal statement of the program. In a co-authored paper (Cole & McNay, in press) a colleague and I raise questions about the goals of preservice programs in light of what might be appropriate for induction programs and continuing teacher education. In that paper and elsewhere (Cole & McNay, 1988; McNay & Cole, in press) we suggest that many of the stated goals of preservice teacher education programs should be restated as lifelong career goals with the activities designed for their achievement introduced and perhaps repeated at appropriate points along the teacher education continuum.

It seems reasonable that the preservice program be an appropriate official starting point for the development of a professional and reflective attitude and a commitment to ongoing professional development. And from an analysis of the students' perceptions of the BPT program it seems that many students share

this view. Although the assumption of teacher development as an ongoing process was certainly implied in the title of the program, no commitment beyond the end of the preservice year was required. Yet, it is clear that many students seized the opportunity, provided them in the self-inquiry program, to establish starting points for their ongoing professional development. Several students described the BPT statement itself as a tangible starting point from which they intended to progress: *a **base** from which to begin and change; a **cornerstone** for career progress; a **measuring stick** for the attainment of ideals.* *I know,* wrote one, *where I'm starting from and I have an idea of where I want to go. This should be an interesting comparison five to ten years from now.*

Uncertainty and professional curiosity is reflected in many of the students' comments. One student admitted, *I still feel unsettled about my personal theory. I'm not really ready to make a definite statement. The exercise helped me to bring this whole area to mind to use for future consideration.* Another wrote, *I now have a professional mandate (as opposed to just an occupational one) but I would like to delve into the idea that is germinating--there are many contradictions in it yet--and expand on it.* The theory statement was indeed perceived as a <u>beginning</u> personal theory and further development was intended. Several of the students wrote of plans to: ***reevaluate** thoughts each year; **add to, change,** and **develop** their theory; **refer** to it to see **change** and **growth.*** One student remarked, *I want to see how I grow as a professional. I don't want to stagnate.* Another touch of reality

was offered by one who said, *If only I could be sure I would have the discipline to rewrite my theory each year.*

Reflections on the Students' Responses

Earlier, I presented some explanations typically offered for beginning teachers' misconceptions of the importance and relevance of the content of the university-based component of the preservice teacher education program. I suggested that some responsibility for these misconceptions might be assumed by teacher educators. I went on to argue for a constructivist approach to preservice teacher education that would encourage prospective teachers to make explicit and examine preconceptions about teaching and education in order to facilitate personal understanding and professional growth.

The study I report on here was not a statistically correct program evaluation study, and the results are not meant to be predictive or generalizable in the "scientific" sense. I assume, however, that the prospective teachers whose views are expressed here are not exceptional. Therefore, it seems that some important points for consideration can be gleaned from the perceptions and experiences they report.

Prospective and beginning teachers, like the science students I introduced at the beginning, somehow and for some reason(s) construe the relationship between campus/school and classroom/the real world as tenuous, and they have difficulty strengthening that connection. To deny these impressions or to dismiss them as erroneous or inappropriate seems to me to be not only disrespectful

and a grave disservice to the prospective teachers and their students, but also a poor expenditure of time and effort.

The prospective teachers in this study, expressed a need for time and opportunity to reflect on and come to an understanding about the process of becoming a teacher. They indicated a desire to determine and consider their beginning assumptions, attitudes, and beliefs; to make explicit some of their ambitions, both short and long term; and thereby to *conceptualize what teaching is all about*. They wanted to know where they are coming from (their beginning assumptions, attitudes, and beliefs), where they are going (short and long term professional goals), and what they can expect at various points along the way (growth and change with experience). One student described the process as a *pulling together of past experiences and future goals in order to maximize knowledge and beliefs*.

A number of students offered comments about technical aspects of the program, and suggestions for the enhancement of the self-inquiry process. These comments, too, are illustrative of student support for the program. The technical aspects they found to be particularly important were the freedom to choose style of writing because it carried with it an implicit message that the inquiry was a personal endeavour, *for our benefit not yours*, and the step-by-step process encouraged by the cycle. Several students offered comments about the time commitment and overall workload; a few made categorical statements but the majority offered constructive suggestions that might also be interpreted as value statements.

There was a variety of suggestions of ways to expand the self-inquiry program; suggestions to include more BPT activities, to extend summary statements, to devote more class time to discussion and probing of explicated views, and to arrange tutorial groups for the express purpose of theory articulation and development. One student, drawing on the wisdom of experience, in his/her own way offered support for the program saying, *Keep it whether they like it or not!*

Starting Points of Professional Inquiry

In this paper I have quoted generously from the student teachers' written responses to the self-inquiry program. I have done so for two reasons: the first is to listen to **what** they have to say; the second is to recognize **that** they have important things to say, and through this recognition to encourage self-inquiry. It is necessary for teacher educators to listen and respond appropriately to what student teachers have to say about the preservice experience. More importantly, though, it is imperative that we encourage prospective teachers to raise and listen to their own voices. In so doing we initiate and promote the notion of teaching practice as ongoing personal and professional inquiry and development.

Career-long professional development has its formal beginnings in preservice teacher education programs. If teacher education is to indeed become a lifelong developmental process, preservice teacher education must become the official starting point of personal and professional inquiry. Skills in, habits of, and

appropriate attitudes toward reflective practice must be introduced and fostered in the preservice program. This requires a number of changes in the structure and presentation of the program, not the least of which is the voice to which the prospective teachers are encouraged to listen and respond.

The recent trend toward various types of inquiry-based teacher preparation bespeaks the dissatisfaction with how teachers have been prepared for classroom responsibility, and with the assumptions about teaching implicit in traditional preparation programs. Teacher education and teacher practice have, until recently, been left to exist as relatively disconnected entities with teacher education carried out in the preservice program and teaching practice beginning and continuing after teacher education is completed. Teacher educators, in the position of "expert", have provided the information and knowledge requisite to classroom practice. Prospective teachers, as listeners and information gatherers and processors, have studied and acquired the information and knowledge presented to them and, having "completed" their teacher education, have gone off to set up practice.

In order to promote the notion of the teacher education continuum and foster personal and professional inquiry the preservice program must be the official starting point. Inquiry into one's own practice must begin with an explication and examination of the foundations on which the practice will develop.

The student teachers who participated in this study were given an opportunity to begin their professional education with an

emphasis on self-inquiry. If their reactions and comments are of any import (and I think they are), then it would seem appropriate to recommend that preservice programs be structured in a way that encourages prospective teachers to examine their beginning personal theories of teaching and to thereby serve as starting points of teacher education and development.

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